



SEQUENCE LISTING

B 10
<110> The Government of the United States of America, as represented by The
Secretary of the Department of Health and Human Services
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Padlan, Eduardo A.
Jeffery, Schlom

<120> VARIANTS OF HUMANIZED ANTI-CARCINOMA MONOCLONAL ANTIBODY CC49

<130> 4239-61725

<140> US 09/830,748

<141> 2001-04-30

<150> PCT/ US99/25552

<151> 1999-10-29

<150> US 60/106,757

<151> 1998-11-02

<150> US 60/106,534

<151> 1998-10-31

<160> 44.

<170> PatentIn version 3.1

<210> 1

<211> 17

<212> PRT

<213> Mus musculus

<400> 1

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Ala

<210> 2

<211> 7

<212> PRT

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<400> 2

Trp Ala Ser Ala Arg Glu Ser
1 5

<210> 3

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<212> PRT

<213> Mus musculus

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Gln Gln Tyr Tyr Ser Tyr Pro Leu Thr
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<211> 5

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<213> Mus musculus

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Asp His Ala Ile His
1 5

<210> 5

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<213> Mus musculus

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Tyr Phe Ser Pro Gly Asn Asp Asp Phe Lys Tyr Asn Glu Arg Phe Lys
1 5 10 15

Gly

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Ser Leu Asn Met Ala Tyr
1 5

<210> 7

<211> 17

<212> PRT

<213> Homo sapiens

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1 5 10 15

Ala

mb
Ch

<210> 8
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<400> 8

Trp Ala Ser Thr Arg Glu Ser
1 5

<210> 9
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<400> 9

Gln Gln Tyr Tyr Ser Thr Pro Tyr Ser
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<212> PRT
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<400> 10

Ser Tyr Ala Met His
1 5

<210> 11
<211> 17
<212> PRT
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<400> 11

Trp Ile Asn Ala Gly Asn Gly Asn Thr Lys Asn Ser Gln Lys Phe Gln
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Gly

<210> 12
<211> 12
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<400> 12

Gly Gly Tyr Tyr Gly Ser Gly Ser Gly Ser Asn Tyr
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<210> 13
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<220>
<223> Mouse and Human Chimeric Antibody Light Chain Variable Region
<400> 13

Asp Ile Val Met Ser Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Val Thr Leu Asn Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

Gly Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ala Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Ser Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
100 105 110

Lys

<210> 14
<211> 115
<212> PRT
<213> Artificial Sequence

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<223> Mouse and Human Chimeric Antibody Heavy Chain Variable Region
<400> 14

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp His
20 25 30

Ala Ile His Trp Val Lys Gln Asn Pro Gly Gln Arg Leu Glu Trp Ile
35 40 45

Gly Tyr Phe Ser Pro Gly Asn Asp Asp Phe Lys Tyr Asn Glu Arg Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Val Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
85 90 95

Thr Arg Ser Leu Asn Met Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 15
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<223> VH Oligonucleotide Primer

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agtgcactcc caggtccagc tggtgcatgc cggcgctgag tccctggccg tgtcccaagg 120
cgtg 124

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<211> 123
<212> DNA
<213> Artificial Sequence

<220>
<223> VH Oligonucleotide Primer

<400> 16

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ctatagagag tgaagggtgt a gccgcttgcc ttgcaggaaa tcttcacgccc cagggacacg 120
gcc 123

Mb Up M

<210> 17
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<223> VH Oligonucleotide Primer

<400> 17
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aggcaaggc cacactgact gcagacacat ctgccagcac tgcctacgtg gagctctcca 120
gcctga 126

<210> 18
<211> 125
<212> DNA
<213> Artificial Sequence

<220>
<223> VH Oligonucleotide Primer

<400> 18
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tattcaggga tcttgtgcag aagtacactg cagtatcctc ggatctcagg ctggagagct 120
ccacg 125

<210> 19
<211> 122
<212> DNA
<213> Artificial Sequence

<220>
<223> VL Oligonucleotide Primer

<400> 19
gcaagttcc accatggata gccaggccca ggtgctcatg ctccctgctgc tgtgggtgag 60
cgccacatgc ggcgacatcg tcatgagccca gtctccagac tccctggccg tgtcccaagg 120
cg 122

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<211> 121

<212> DNA
<213> Artificial Sequence

<220>
<223> VL Oligonucleotide Primer

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agcaggact ggctggactt gcaattcaga gtcaccctct cggccaggga cacggccagg 120
g 121

<210> 21
<211> 121
<212> DNA
<213> Artificial Sequence

<220>
<223> VL Oligonucleotide Primer

<400> 21
gcagaaaacca gggcagagcc ctaaactgct gattactgg gcatccgcta gggaaatccgg 60
cgtgcctgat cgcttcagcg gcagcggatc tgggacagac ttcactctga caatcagcag 120
c 121

Anal C6

<210> 22
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<223> VL Oligonucleotide Primer

<400> 22
agccgcggcc cgttcagtt ccagcttggt gccagcgccg aatgtgaggg gatagctata 60
atactgctga caataataga ctgccacgtc ttctgcctgc acgctgctga ttgtcagagt 120
gaagtc 126

<210> 23
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide Primer

<400> 23
ctaagcttcc accatggag 19

<210> 24
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 24
atggggccgt agtttggcg

19

<210> 25
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 25
gcaagcttcc accatggata

20

mb
cb
<210> 26
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 26
agccgcggcc cgtttcagtt

20

<210> 27
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Mutagenic primer

<400> 27
gccagcgccg aagctgaggg gatagtata atactgctga ca

42

<210> 28
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Mutagenic primer

Bob Cleary
B16

<400> 28	ggtgccagcg	ccgaagctga	gggggggtgct	ataatactgc	tgaca	45	
<210> 29							
<211> 42							
<212> DNA							
<213> Artificial Sequence							
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<223> Mutagenic primer							
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<210> 30							
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<213> Artificial Sequence							
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<210> 31							
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<210> 33							
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<400> 33

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys
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<210> 34

<211> 15

<212> PRT

<213> Homo sapiens

<400> 34

Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr
1 5 10 15

<210> 35

<211> 32

<212> PRT

<213> Homo sapiens

<400> 35

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys
20 25 30

<210> 36

<211> 10

<212> PRT

<213> Homo sapiens

<400> 36

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
1 5 10

<210> 37

<211> 30

<212> PRT

<213> Homo sapiens

<400> 37

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
20 25 30

<210> 38
<211> 14
<212> PRT
<213> Homo sapiens

<400> 38

Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met Gly
1 5 10

<210> 39
<211> 32
<212> PRT
<213> Homo sapiens

<400> 39

Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr Met Glu
1 5 10 15

mb
CV
Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
20 25 30

<210> 40
<211> 11
<212> PRT
<213> Homo sapiens

<400> 40

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
1 5 10

<210> 41
<211> 424
<212> DNA
<213> Artificial Sequence

<220>

<223> Mouse and Human Nucleotide Sequences Encoding a Chimeric Antibody
Light Chain Variable Region Together with Flanking Oligomers

<400> 41

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cggcacatgc ggcgacatcg tcatgagccca gtctccagac tccctggccg tgtcccaggg 120

cgagagggtg actctgaatt gcaagtccag ccagtcctg ctctatagcg gaaatcagaa 180

gaactatctc gcctggatc agcagaaacc agggcagagc cctaaactgc tgatttactg
ggcatccgct agggaaatccg gcgtgcctga tcgcttcagc ggcagcggat ctggacaga 300
cttcactctg acaatcagca gcgtgcaggc agaagacgtg gcagtctatt attgtcagca 360
gtattatagc tatccctca cattcggcgc tggcaccaag ctgaaactga aacggggcgc 420
ggct 424

mb C4
<210> 42
<211> 424
<212> DNA
<213> Artificial Sequence

b10
<220>
<223> Nucleotide Sequences Complementary to Mouse and Human Nucleotide Sequences Encoding a Chimeric Antibody Light Chain Variable Region Together with Flanking Oligomers

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atactgctga caataataga ctgccacgtc ttctgcctgc acgctgctga ttgtcagagt
gaagtctgtc ccagatccgc tgccgctgaa gcgatcaggc acgcccggatt ccctagcgg 180
tgcccagtaa atcagcagtt tagggctctg ccctggtttc tgctgataacc aggcgagata 240
gttcttctga tttccgctat agagcaggga ctggctggac ttgcaattca gagtcaccct
ctcgcccagg gacacggcca gggagtctgg agactggctc atoacgtatgt cgccgcatgt 360
gccgctcacc cacagcagca ggagcatgag cacctgggcc tggctatcca tggtggaaagc 420
ttgc 424

<210> 43
<211> 434
<212> DNA
<213> Artificial Sequence

<220>
<223> Mouse and Human Nucleotide Sequences Encoding a Chimeric Antibody Heavy Chain Variable Region Together with Flanking Oligomers

<400> 43
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agtgcactcc caggtccagc tggtgctgatc cggcgctgag tccctggccg tgtcccagg 120
cgtgaagatt tcctgcaagg caagcggcta caccttcaact ctctatagcg gaaatcagaa 180
gaaacagaat cctggacagc gcctggatg gattggatat ttctctcccg gaaacgtga 240

tttaagtac aatgagaggt tcaaggc aa ggcacactg actgcagaca catctgccag 300
cactgcctac gtggagctct ctagcctgag atccgaggat actgcagtgt acttctgcac 360
aagatccctg aatatggcct actgggaca gggaccctg gtcaccgtct ccagcgccaa 420
aactacgggc ccat 434

MB
CB
M
B 10
Conf

<210> 44
<211> 434
<212> DNA
<213> Artificial Sequence

<220>
<223> Nucleotide Sequences Complementary to Mouse and Human Nucleotide Sequences Encoding a Chimeric Antibody Heavy Chain Variable Region Together with Flanking Oligomers

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tattcaggga tcttgtgcag aagtacactg cagtagtcctc ggatctcagg ctggagagct 120
ccacgttaggc agtgctggca gatgtgtctg cagtcagtgt ggccttgccc ttgaacctct 180
cattgtactt aaaatcatcg tttccgggag agaaatatcc aatccactcc aggcgctgtc 240
caggattctg tttcttctga tttccgctat agagagtcaa ggtgttagccg ctggccttgc 300
agaaatctt cacgcccagg gacacggcca gggactcagc gccggactgc accagctgga 360
cctgggagtg cactctcacc cacagcagca ggaggaagag gaagacccag gaccactcca 420
tggtggaaagc ttag 434